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ABSTRACT

This paper addresses the cross-cultural development and use of the Behavior Description Index (BDI). The development of culturally-transportable scales; cross-cultural comparisons of results for 12 Spanish, 15 Hungarian, 15 Indonesian, and U.S. managers; and the transportability of competencies as constructs are considered. A competency is an underlying characteristic of an individual that is causally related to effective or superior performance on the job; competencies are the critical success factors that are demonstrated by superior performers. Nineteen core competencies, which pertain to self-management, cognition, achievement, influence, and management, help predict success in professional and managerial jobs. The BDI includes 218 items and 2 validity scales (frankness and behavioral consistency). Core competencies that drive successful managerial performance are relevant across cultures. Respondent instruments, as represented by the BDI, may provide self-assessment data that are reliable, culturally transportable, and congruent with construct validity. Managers in capitalist economies have similar competency profiles. Managers in socialist economies have different competency profiles from capitalistic managers. Cross-cultural, self-assessment competency/personality instruments may be applied if linguistic and cultural relativism, cross-cultural item and scale development, and item translation have been sufficiently addressed. Nine handouts are included. (RLC)

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Development and Cross-Cultural Application of a Competency Assessment Questionnaire

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and
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Hay/McBer

Presented as a part of the Symposium, Transporting Managerial Assessment Across Cultures, V.J. Arnold, Chair. Presented at the Seventh Annual Conference, Society for Industrial and Organizational Psychology, Montreal, Quebec, May 2, 1992.

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Introduction

For the past 25 years, Hay/McBer has been investigating the identification of managerial critical success factors that differentiate star performers from average performers. Following the research of David McClelland (1973, 1984, 1985), a co-founder of McBer, we have developed and applied a competency modeling process for articulating the competencies that drive exceptional job performance. This process has been applied in over 250 studies involving managers from twenty four countries.

Following McClelland's concepts, Hay/McBer had traditionally assessed managers through "operant" rather than "respondent" techniques. Operant techniques involve open-ended situations in which individuals must generate behaviors. A good example of this is the Behavior Event Interview, an interview process in which open-ended questions probe an individual's actions and motives in past situations. This process helps record the individual's "operant" behaviors in response to situations. In contrast, respondent measures, such as self-report questionnaires and multiple-choice tests, have not frequently been used by competency researchers. This is because of the belief that respondent instruments are subject to response biases and consequently will not identify true competence.

Because of our recent research on competency behaviors, in the past year we have developed and cross-culturally researched several self-report, (respondent) instruments. Our presentation today will address one of these instruments, the Behavior Description Index (BDI).

Specifically, our presentation will address the cross-cultural development and application of a self-report competency assessment questionnaire. In doing this, we will briefly address: 1) the definition of a competency, 2) the core (cross cultural) management competencies, 3) the development of culturally-transportable scales, 4) the cross-cultural comparison of results, and 5) the transportability of competencies as constructs.

What is a Competency?

A competency is an underlying characteristic of an individual which is causally related to effective or superior performance on the job (Boyatzis, 1982). They are the "critical success factors" that are demonstrated by superior performers. Competencies are what superior performers 1) possess as underlying characteristics, 2) demonstrate in more situations, and 3) apply with better results.

Competencies are diverse and can be any human attribute that can be measured reliably and that can be shown to differentiate significantly between superior and average performers. As shown in Attachment 2, (Different Types of Competencies), they may consist of such things

as 1) Knowledge, 2) Skills, 3) Social Roles, 4) Self Image, 5) Traits, and 6) Motives. They are the underlying characteristics that when employed in a situation, predict skilled behavior, which in turn predicts job performance (Spencer & Spencer, in press).

As shown in Attachment 3, competencies differ in the extent to which they can be taught. Knowledge and skills can be most easily taught and motives and traits are most difficult to teach. From a cost effectiveness standpoint, the rule is to hire for deep-seated characteristics and to develop knowledge and skills. However, most organizations do the reverse; they hire on the basis of educational credentials and assume that candidates come with, or can be indoctrinated with, the appropriate motives and traits.

A final point that we would like to make is that competencies are what employers (i.e., customers who hire workers) tend to be looking for. In contrast, educators and developers (i.e., suppliers who "mold" workers) tend to deal with knowledge and skills. Like the manufacturer who doesn't attend to and provide what the customer wants, educators and psychologists may potentially be accused of focusing on the wrong things. The current "crisis in education" as evidenced by the SCANS report, is oriented toward redirecting our educational systems toward educating for competence rather than for skills (SCANS, 1991).

The Core Management Competencies

We recently undertook an analysis of over 200 competency studies to identify the Core Competencies that appear to be consistently related to job effectiveness. We content analyzed well over 1000 behavioral indicators (i.e., critical incidents), identified in interviews with managers from 24 countries, that drove successful job outcomes. By assuring the broad cultural diversity of the key differentiating behaviors that we analyzed, we helped assure the cross-cultural relevance of these competencies.

Nineteen Core Competencies most often found to predict success in professional and managerial jobs were identified (Spencer & Spencer, in press). These are identified in the Handout and are grouped in the following five clusters:

- Self Management - four competencies that relate to personal style and are generally associated with personal maturity. These relate to superior performers in a wide variety of jobs.
- Cognitive - three competencies that relate to problem solving and cognitive style. They are important to many technical/professional and basic managerial jobs as well as jobs in strategic thinking and planning.

- Achievement - three competencies relating to taking individual initiative and personal responsibility for task accomplishment to a standard of excellence. They relate to entrepreneurial, sales, and knowledge-worker jobs where drive, persistence, and self-directed goal setting are important.
- Influence - five competencies relating to influencing and interacting with others. They are important for managerial, sales, and staff jobs.
- Managerial - four competencies relating to supervising and directing others. They are important for supervisory, leadership, political and educational jobs.

The Development of Culturally Transportable Scales

We developed the BDI after we analyzed eight personality instruments and found only a handful of items that appeared to assess our core competencies. We then decided to develop our own instrument and constructed items by stating the collected behavioral indicators in simple terms. Consultants from the U.S., U.K., Singapore and Spain helped in building this instrument (Page & Spencer, 1991). In developing this instrument, we found the following issues to be important:

- Linguistic Relativism: Whorf (1956) addresses a critically important issue in defining the concept of linguistic relativism. In essence, he says that people's perception of reality and behavior are defined by the structure and content of language. We found that certain words or concepts didn't translate into Chinese, Spanish or even the English dialect as used outside of the U.S. Consequently, we only included items that would linguistically convey the same meaning across cultures. Also, the choice of words in English was at times based on the ease of translating it into other languages. For example, we found the following idioms to not work even among English speaking cultures: "mad," "I figure that," and "mind boggler questions". We found that "angry," "I assume that," and "mind teaser questions" to be more transportable and cross culturally meaningful.
- Cultural Relativism: An example of this can be drawn from our efforts to scale the instrument. We had anticipated a true-false or three-point Likert response scale. Our consultants in Singapore strongly argued for a five point scale to accommodate the Asian perspective which sees things more in terms of shades of gray and where to say "no" or "false" is not polite. We found that two or three response alternatives would not permit sufficient room for obtaining meaningful behavioral description among Asians. The five - point Likert scale format appears

to resolve this issue.

- Multiple Translation: The items were developed and reviewed by consultants from several cultures before they were finalized. After developing the BDI, it was translated into Spanish, Dutch and Hungarian. We had our translators translate it and then had our consultants, who were fluent in English and their native tongue, translate it back to English. Certain consultants completed the instrument in both English and their native language and we compared the results. We found that the key to effective translation was that: 1) we translated for meaning, not words; 2) items were behaviorally stated in terms of concrete rather than abstract behaviors; and 3) the instrument had simple declarative statements - at the sixth grade reading difficulty level.

Cross-Cultural Comparisons of Results

The BDI resulting from the above process consists of 218 items. An example item from each competency is presented in the Handout. Items were crafted in a content-balanced manner for all the scales, meaning that half the items on a scale describe high competence and half describe low competence. This was done to reduce the effects of social desirability and response sets. The competency scales consist of 10 to 12 items, were rationally keyed from our a priori definitions, and have a median alpha reliability of .71 with an international sample.

There are two validity scales, Frankness and Behavioral Consistency. Frankness is like the K scale on the MMPI, and is designed to identify those who try to "fake positive". Behavioral Consistency consists of pairs of behaviorally opposite terms and is designed to detect those who are inattentive or inconsistent in responding.

Figure 5 presents mean profiles from four diverse groups (representing all group data collected in the three months since introduction of this form):

- A group of managers/consultants from Madrid, Spain (N = 12). They were described as aggressive, successful business people.
- A group of managers from Budapest, Hungary (N = 15). This group has spent their working careers in a socialist economy and are trying to determine how to transform themselves into budding capitalists.
- A group of managers/consultants from Jakarta, Indonesia (N = 15). These are successful business people who have been influenced by the Chinese entrepreneurial style.

- A group of secretaries from a large, New York Financial Services Company. They have been included as a contrast group, because most competency scales were designed to identify successful managers.

The scale scores are percentalized raw scores with a median score of 55 and a median standard deviation of 13. The exception is Behavioral Consistency, with a mean of 78.

This figure reflects significant group differences on all competencies other than Self Control, Flexibility, and Behavioral Consistency (Univariate $F \leq .01$; t tests on Table 1).

In general, the successful managers/consultants from Spain and Indonesia look very similar. Likewise, the Hungarian managers generally have a similar profile to that of secretaries. There are two exceptions to this. First, the secretaries are higher on Organizational Commitment. This scale was designed to assess organizational conformity, as is important for secretaries, and is reflective of corporate success rather than entrepeneural success. Secondly secretaries were generally high on Concern for Order. This is congruent with our previous research indicating a high concern for precision and orderliness for secretaries. Table 1 presents scale reliability, mean and standard deviation data.

The "capitalist" managers/consultants were generally highest on: Self Confidence, Analytic Thinking, Conceptual Thinking, Achievement Orientation, Impact and Influence, Organizational Awareness, Relationship Building, and all four of the management competencies.

Transportability of Competencies as Constructs

Generally speaking, the competency scales on this instrument appear to have effectively transported across cultures. Additional data (on an earlier version of the BDI) from a socialized mining industry in Belgium (which the government is closing down) reveals a profile similar to that from Hungary. Additional managerial profiles from the U.S. reflect profiles similar to that of Spain and Indonesia.

Internal consistency reliabilities for the separate culture groups were very similar. In our analysis thus far, we have diagnosed three cultural differences that were not fully anticipated in our development of the instrument:

- Directiveness: In general, American managers are willing to be more directive than those of other countries. They may be more confrontive and more likely to discipline employees. For example, European managers can't fire someone without taking on substantial governmental regulation and financial burdens. Preliminary data suggest that Americans may be more directive.

- Impact and Influence: The desire to influence others through complex strategies appears to be perceived as more Machiavellian in other cultures than it does in the U.S. Consistency on this scale (alpha) has been less for non-U.S. samples.
- Frankness: This scale was designed around the admission of common foibles such as envy, honesty, pride, etc. Because of cultural relativism, this scale appears to be reflecting cultural differences. The more "macho" or Power Distance (Hofstede, 1980) business cultures of Spain and Indonesia reflect the need for great care in crafting items dealing with human foibles. Frankness, the reverse of faking positive, has probably been the most difficult construct to cross-culturally transport.

Conclusion

Our cross-cultural research has helped us identify the following key conclusions:

- The core competencies that drive successful managerial performance appear to be relevant across cultures.
- Respondent instruments, as represented by the BDI, may provide self-assessment data that is reliable, culturally transportable, and congruent with construct (nomological network) validity hypothesis.
- Managers in capitalistic economies tend to have similar competency profiles.
- Managers from socialistic economies tend to have different competency profiles from that of capitalistic managers.
- Cross-cultural, self-assessment competency/personality instruments may be applied if sufficient attention has been directed toward:
  - Linguistic and Cultural Relativism
  - Cross-cultural item and scale development
  - Item translation
- The "global economy" is providing an ever increasing need for psychologists to identify the pan-cultural, critical success factors of managerial effectiveness.

We look forward to further advancements in this important area.

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Development and Cross-Cultural Application of a Competency Assessment Questionnaire

Ronald C. Page & Ignacio Suarez De Puga

Hay/McBer

Overview

- What are Competencies?
- Definition of Core Competencies for the BDI
- Development of Transportable Scales
  - Linguistic/Cultural Relativism
  - Item Development Methods
- Cross-Cultural Comparisons
- Transportability of Competencies as Constructs

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A "Language" of Competencies

What Are Competencies?

- Personal Characteristics of Superior Performers
- What *Superior Performers*:
  - Possess as Underlying Characteristics
  - Demonstrate in More Situations
  - Apply with Better Results

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Types of Competencies

- **KNOWLEDGE**
  - Information that a person uses on the job
  - e.g., knowledge of planning or manufacturing
- **SKILL**
  - Ability to do something well
  - e.g., active listening or public speaking
- **SELF-IMAGE**
  - A person's sense of identity and confidence
  - e.g., a leader or team player
- **SOCIAL ROLE**
  - Behavior patterns that are socially reinforced
  - e.g., manager or professional
- **TRAIT**
  - A typical aspect of a person's behavior
  - e.g., tenacity or intuitive thinking
- **MOTIVE**
  - Recurrent thoughts that drive behavior
  - e.g., individual achievement or power

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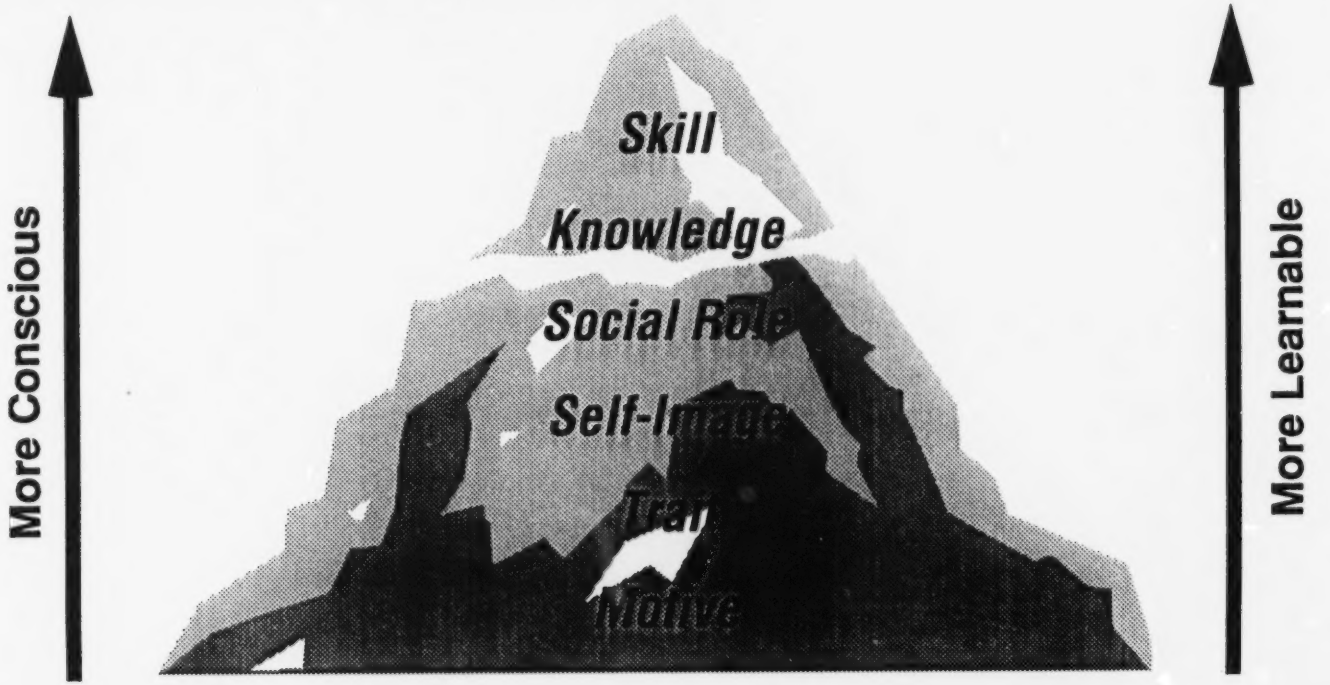
The Competency Foundation

Characteristics at Different Levels



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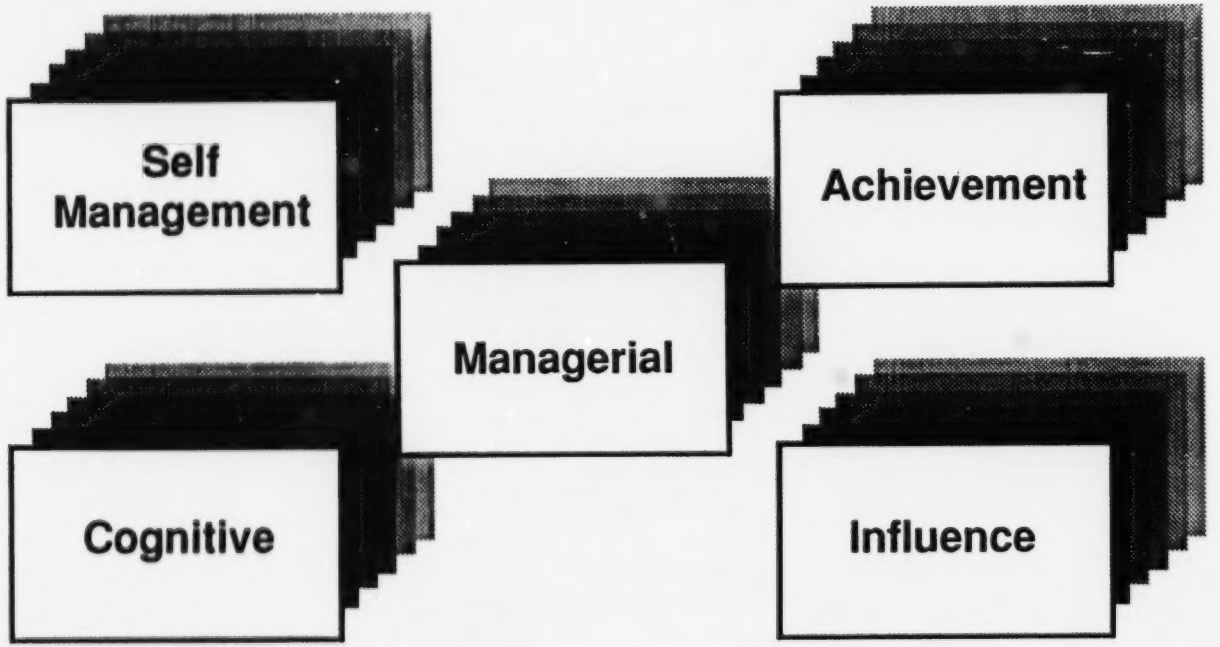
Competency Clusters



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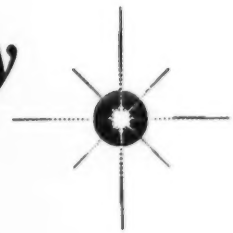
Considerations in Transportability



- **Linguistic Relativism**
- **Cultural Relativism**
- **Multiple Translation**

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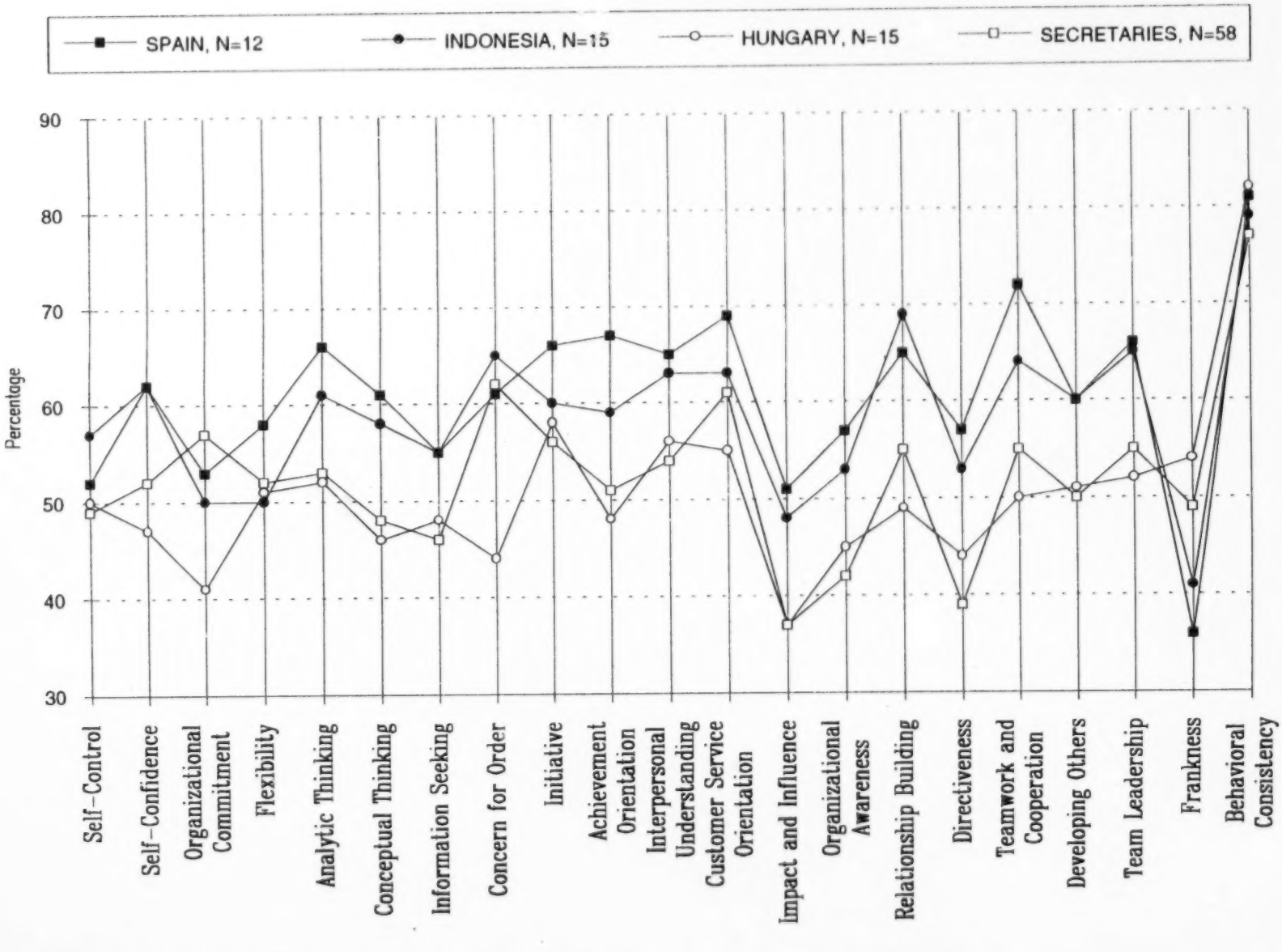
BDI PROFILE COMPARISON REPORT



Conclusions

- **Core Managerial Competencies Appear to Be Culturally Transportable**
- **Self-Report (Respondent) Competency Instruments May Provide Reliable and Valid Information**
- **Capitalistic Managers Appear to Be Different from Socialistic Managers on Competencies**
- **Cultural Transportability Is Enhanced If Cultural Diversity Is Accommodated in Scale Development**
- **The "Global Economy" Is Contributing to Our Need to Understand More in This Area**

Behavioral Description Index — Definition of Scales

Self-Management Cluster

1. ***Self-Control*** —The ability to keep one's emotions under control when provoked, when faced with opposition or hostility from others, or when working under conditions of stress. This includes the ability to restrain negative emotion or action in oneself.

   ✚ I stay calm and objective in situations of stress or conflict.

2. ***Self-Confidence***— A belief in one's own capability to accomplish a task and select an effective approach to a task or problem. This includes confidence in one's own decisions or opinions, and the ability to assert one's perspective or opinion.

   — I don't like talking in front of a group of people.

3. ***Organizational Commitment*** — The ability and willingness to align one's own behavior with the needs, priorities and goals of the organization. This includes respecting organizational rules, matching one's behavior to the organization's expectations, effectively handling confidential matters, and aligning one's priorities with the organization's mission.

   ✚ I carefully match my behavior to the organization's expectations.

4. ***Flexibility*** — The ability to adapt to and work effectively with a variety of situations, individuals or groups. This includes the ability to adapt to changes in one's own organization or job requirements, the ability to understand and appreciate different and opposing perspectives on an issue, and to adapt one's approach as the requirements of a situation change.

   — .I don't like changing the way I do things.

Cognitive Cluster

5. ***Analytical Thinking*** — The ability to break or analyze a complex problem, process or project into its component parts and to consider the parts in a systematic way. This includes the ability to make systematic comparisons of different features or aspects; or setting priorities, time sequence, and causal if→ then relationships.

   ✚ I am good at anticipating problems and planning ways to deal with them.

6. ***Conceptual Thinking*** — The ability to identify patterns or connections between situations that are not obviously related to identify the key or underlying issues in complex situations. This includes creative, conceptual or inductive reasoning.

   — I have difficulty seeing connections or patterns in complex situations.

7. ***Information Seeking*** — Collecting and using relevant information on work-related problems or issues. This includes digging deeper, getting several opinions or inputs, and carefully investigating issues and known facts before making decisions.

   ✚ I check several sources of information before making up my mind.

Achievement Cluster

8. ***Concern for Order*** — A concern for minimizing errors and maintaining high standards for quality of work. This is expressed in such forms as monitoring and checking work or information, keeping orderly records, and carefully planning tasks.

   — I don't bother keeping detailed records.

9. ***Initiative*** — The tendency to act on one's own, and be persistent, to go beyond the job description, beyond what is asked, in order to get the job done. This includes being self–directed, seizing opportunities, and undertaking extraordinary personal efforts.

   — I have a tendency to give up when I meet difficult problems.

10. ***Achievement Orientation*** — The desire to achieve, improve performance, and do a task better by committing oneself to accomplishing challenging objectives, or competing against a self–defined standard of excellence. This includes a willingness to commit significant effort in uncertain situations to reach challenging goals.

    ✚ I like to set challenging goals for myself and then measure my performance against related standards.

Influence Cluster

11. ***Interpersonal Understanding*** —The ability to understand and interpret other individuals' concerns, motives and feelings, and a tendency to take the time to try to understand others.

    — I have difficulty understanding the unspoken concerns or feelings of others.

12. ***Customer–Service Orientation*** — A desire to help or service others. This includes focusing one's efforts on discovering and meeting the customer's or client's needs.

    ✚ I like to work together with customers in solving their problems.

13. ***Impact and Influence*** — The desire to impact others and the ability to influence or affect others through persuasiveness and influence strategies. This includes taking calculated steps to have a particular impact on others.

    ✚ I try to influence others by anticipating their reactions and preparing relevant arguments.

14. ***Organizational Awareness*** — The ability to understand and learn the power relationships on one's own organization or in other organizations (customers, suppliers, etc.). This includes the ability to identify who are the real decision makers and the individuals who can influence them; and to predict how new events or situations will affect individuals and groups within the organization.

    — I don't spend time trying to understand political relationships in the organization.

15. ***Relationship Building*** — The tendency to develop and maintain a network or contacts both inside and outside one's own organization, with people who may be able to supply information, assistance, or support for work–related goals.

    — I don't like to socialize too much with people I work with.

Managerial Cluster

16. ***Directiveness*** — The tendency to use the power of one's position in an effective and appropriate way, to enforce rules, to confront others about performance problems, to set boundaries for others' behavior, and to tell others what they must do.

    ✚ I don't hesitate to confront those who fail to "do" or "behave" as I expect.

17. ***Teamwork and Cooperation*** — The disposition to work cooperatively with others, to be a part of a team, to work cooperatively rather than working alone or competitively.

    — I don't spend much time involving lots of people in making group plans or decisions.

18. ***Developing Others*** — The disposition to try to effectively teach, train, develop or otherwise improve the skills of others. This includes taking steps or seeking out opportunities to develop others.

    ✚ I often encourage people in order to improve their motivation or performance.

19. ***Team Leadership*** — The tendency to assume a leadership or motivational role when in group settings. This includes communicating goals, managing meetings, and motivating others.

    — I am not good at communicating a goal or objective that motivates others.

Other Cluster

20. ***Frankness*** — The tendency to be frank and honest in describing one's characteristics. This includes a willingness to admit that one is not extremely virtuous and that one does have minor foibles. This is used as a validity scale for identifying the respondents that may be attempting to look unusually good on the questionnaire. Reasonably honest respondents should have a score above 30.

    ✚ I have never repeated any gossip or rumors.

21. ***Behavioral Consistency*** — A consistency in describing one's self on the questionnaire. For pairs of items that represent opposite behaviors, high scoring respondents have tended to select opposite responses. This is used as a validity scale to identify individuals who are inattentive in responding or are making random responses. Properly completed questionnaires should have a score above 50.

    ✚ When something blocks what I am doing, I don't stop until I have found a way around it.

    — I have a tendency to give up when I meet difficult problems.

Note: Items with a "✚" are positively keyed and items with a "—" symbol are negatively keyed.

BDI SCALE STATISTICS							
Scale	Alpha Reliability (N-100)	Spain & Indonesia (N = 27)		Hungary (N = 15)		Secretaries (N = 55)	
		Mean	SD	Mean	SD	Mean	SD
1. Self Control	.76	56	11.0	51	12.5	50*	14.2
2. Self Confidence	.75	63	10.1	47**	8.3	52**	13.8
3. Organizational Commitment	.66	52	10.8	42*	9.9	57*	11.8
4. Flexibility	.71	54	12.1	51	9.6	53	12.1
5. Analytic Thinking	.74	64	10.6	53*	10.8	54**	11.4
6. Conceptual Thinking	.78	60	12.4	47**	9.4	49**	15.0
7. Information Seeking	.74	56	9.6	48*	10.5	47**	13.6
8. Concern for Order	.80	64	12.1	44**	10.8	62	15.6
9. Initiative	.57	63	7.6	59	7.8	56**	11.2
10. Achievement Orientation	.71	63	10.1	48**	8.1	51**	11.9
11. Interpersonal Understanding	.69	65	8.3	57*	8.5	55**	13.9
12. Customer Serv. Orientation	.68	66	10.4	56**	6.5	62	11.4
13. Impact and Influence	.60	50	10.7	38**	8.9	38**	11.7
14. Organizational Awareness	.70	55	12.1	45*	8.8	43**	15.2
15. Relationship Building	.71	68	13.5	50**	8.1	55**	13.6
16. Directiveness	.73	55	12.8	44*	10.3	40**	14.3
17. Teamwork and Cooperation	.71	68	10.7	51**	10.1	56**	12.7
18. Developing Others	.69	60	8.0	52**	6.0	50**	12.1
19. Team Leadership	.76	66	10.3	52**	7.3	55**	14.6
20. Frankness	.75	39	16.6	55*	13.2	50*	17.4
21. Behavioral Consistency	.78	80	4.9	82	4.3	77	8.5

* P> .05 for t contrast with Spain & Indonesia.
**P> .001 for t contrast with Spain & Indonesia.